

WHAT IS CLAIMED IS:

1. A method for fabricating a gate mask for a semiconductor device, wherein a nitride layer of the gate mask for the semiconductor device is deposited at a temperature higher than 750 deg. C so as to release hydrogen from said nitride layer.

2. The method for fabricating a gate mask for a semiconductor device according to claim 1, wherein said temperature is higher than 830 deg. C.

3. A method for fabricating a gate mask of a semiconductor device, wherein a nitride layer of the gate mask for the semiconductor device is deposited in a gas atmosphere of an ammonia gas and a silane gas, a flow rate of said ammonia gas being at least twenty times a flow rate of the silane gas.

4. A method for fabricating a gate mask of a semiconductor device, wherein a nitride layer of the gate mask for the semiconductor device is deposited in a gas atmosphere of an ammonia gas and a silane gas, a flow rate of said ammonia gas being from twenty to one hundred times a flow rate of the silane gas.

5. The method for fabricating a gate mask of a semiconductor device according to any one of claims 1 through 4, comprising:

depositing a tungsten silicide layer on a polysilicon layer or an amorphous silicon layer which is formed on a silicon substrate; and

depositing a nitride layer on said tungsten silicide layer with an ammonia gas and a silane gas.